

## Title (en)

VIDEO ENCODING USING MOTION COMPENSATED EXAMPLE-BASED SUPER-RESOLUTION

## Title (de)

VIDEOKODIERUNG MIT BEWEGUNGSKOMPENSIERTER, BEISPIELBASIERTER HOCHAUFLÖSUNG

## Title (fr)

CODAGE VIDÉO UTILISANT SUPER RÉOLUTION COMPENSÉE EN MOUVEMENT PAR L'EXEMPLE

## Publication

**EP 2614641 A2 20130717 (EN)**

## Application

**EP 11757721 A 20110909**

## Priority

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## Abstract (en)

[origin: WO2012033962A2] Methods and apparatus are provided for encoding video signals using motion compensated example-based super-resolution for video compression. An apparatus includes a motion parameter estimator (510) for estimating motion parameters for an input video sequence having motion. The input video sequence includes a plurality of pictures. The apparatus also includes an image warper (520) for performing a picture warping process that transforms one or more of the plurality of pictures to provide a static version of the input video sequence by reducing an amount of the motion based on the motion parameters. The apparatus further includes an example-based super-resolution processor (530) for performing example-based super-resolution to generate one or more high-resolution replacement patch pictures from the static version of the video sequence. The one or more high-resolution replacement patch pictures are for replacing one or more low-resolution patch pictures during a reconstruction of the input video sequence.

## IPC 8 full level

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## CPC (source: EP KR US)

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## Citation (search report)

See references of WO 2012033962A2

## Citation (examination)

- WO 03103289 A1 20031211 - PIXONICS INC [US], et al
- LE GUEN B ET AL: "Motion-Geometry Compensation for Analysis-Synthesis Video Coder", MULTIMEDIA SIGNAL PROCESSING, 2007. MMSP 2007. IEEE 9TH WORKSHOP ON, IEEE, PISCATAWAY, NJ, USA, 1 October 2007 (2007-10-01), pages 300 - 303, XP031224836, ISBN: 978-1-4244-1274-7

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